Additional modifications are contemplated. In one embodiment, the radio-controlled car **10** may be modified to include alternate motors and associated gear assemblies. For example, and referring now to FIG. **17**, the generally modular nature of the radio-controlled car **10** allows for the replacement of the motor **32** with a variety of performance-enhancing, or otherwise performance-altering, motors such as motors M**1**–M**8** having the specifications depicted in FIG. **17**. FIG. **17** depicts an example of a legend that may be provided with the motors M**1**–M**8** to aid a user in identifying the specifications associated with each motor. It is understood that the specifications depicted in FIG. **17** are for the purposes of example only, and as such, the motor **32** may be replaced with any type of performance-enhancing, or otherwise performance-altering, motor. In one embodiment, the motors having the specifications depicted in FIG. **17** may be sold in kits, and as such, may be color coded to aid a user in identifying the performance aspects of each motor.

In one example, a plurality of motors, represented by M**1**–M**4**, having varying power and speed arrangements are provided in a motor kit **500** such that a user may remove the original motor **32** provided with the radio-controlled car **10** and replace the motor **32** with any one of the motors provided in the motor kit **500**. As is well understood in the art, the gear ratio of a motor, such as the motors M**1**–M**4**, is directly proportional to the power provided by each of the motors M**1**–M**4**, yet inversely proportional to the speed provided by each of the motors M**1**–M**4**. As such, in one embodiment, the motors M**1**–M**4** of the motor kit **500** may each be provided with a different gear ratio to offer the user a variety of motors M**1**–M**4** with which to replace the motor **32**. In the present example, the motors M**1**–M**4** are capable of achieving 26,000 revolutions per minute (hereinafter "RPM"), which may be preferable for the above-described four-wheel drive configuration of the radio-controlled car **10** as such motors may offer less speed but added torque for handling in tight driving conditions.

Of course, the RPM of the motors provided in the motor kit **500** may be variable, and therefore, a motor kit **500***a* may be provided to offer a plurality of motors M**5**–M**8** having a higher RPM relative to the motors M**1**–M**4** of the motor kit **500**. For example, the motors M**5**–M**8** may be capable of achieving 30,000 RPM, which may be preferable in driving conditions in which higher speed and less torque are preferable, such as straight-away drag racing. Moreover, as with the motor kit **500**, the motors M**5**–M**8** of the motor kit **500***a* may be provided with varying gear ratios to offer the user a variety of motors M**5**–M**8** with which to replace the motor **32**. It is understood that the above-described RPM values and the gear ratio values depicted in FIG. **17** are by way of example only, and these values may be altered without departing from the spirit of the present disclosure.

Other alterations may be made to the motors of the motor kits **500** and **500***a* such as providing the motors with brass pinion gears, which may lead to an increased life of such pinion gears. Moreover, the motors M**1**–M**4** and/or M**5**–M**8** may be provided with an associated heat sink to dissipate the heat generated during operation of such motors. Still further, the motor kits **500** and **500***a* may also include alternative bevel and/or axle gears, which can replace the original bevel and axle gears **76** and **82**, respectively.

In operation, and referring to FIGS. **5** and **17**, the motor **32** is replaced with a performance-altering motor, such as any one of the motors M**1**–M**4** or M**5**–M**8** of motor kits **500** and **500***a*, respectively, by loosening the screws **60** and **66** associated with the rear motor casing **52** and the front motor casing **56**, respectively, and removing the motor **32** from the chassis **14**. The motor **32** is then separated from the rear motor casing **52** and the front motor casing **56** and is replaced with the desired performance-altering motor. The performance-altering motor is then inserted into the chassis **14** and secured thereto by inserting the screws **60** through the receiving portions **58** of the rear motor casing **52** and inserting the screws **66** through the receiving portions **64** of the front motor casing **56**, and further securing the screws **60** and **66** to the bosses **62** and **68**, respectively.

The present invention has been described relative to several preferred embodiments. Improvements or modifications that become apparent to persons of ordinary skill in the art after reading this disclosure are deemed within the spirit and scope of the application. For example, a variety of alternate circuit configurations and components may be used to achieve the functionality of the steering control circuit described above. Furthermore, alternate controls may be provided that accomplish similar functions to those described herein. Accordingly, it is understood that several modifications, changes and substitutions are intended in the foregoing disclosure and, in some instances, some features of the invention will be employed without a corresponding use of other features. It is also understood that all spatial references, such as "right", "left," "longitudinal," "top," "side," "back," "rear," "middle," and "front" are for illustrative purposes only and can be varied within the scope of the disclosure. Accordingly, it is appropriate that the appended claims be construed broadly and in a manner consistent with the scope of the invention.

What is claimed is:

1. A radio-controlled car convertible from a two-wheel drive configuration to a four-wheel drive configuration, comprising a chassis, a first drive assembly positioned in a first portion of the chassis, and a modular second drive assembly adapted to be inserted into a second portion of the chassis to modify the radio-controlled car to a four-wheel drive configuration.

2. The radio-controlled car of claim **1** wherein the first drive assembly is a rear wheel drive assembly and the first portion of the chassis is a rear portion of the chassis.

3. The radio-controlled car of claim **2** wherein the second drive assembly is a front-wheel drive assembly and the second portion of the chassis is a front portion of the chassis.

4. The radio-controlled car of claim **3** further comprising a drive shaft extending from the rear portion of the chassis to the front portion of the chassis, the drive shaft being operatively connected to the rear wheel drive assembly and the front-wheel drive assembly.

5. The radio-controlled car of claim **4** further comprising a motor having a rotatable shaft, the motor being adapted to impart motion to the rear wheel drive assembly.

6. The radio-controlled car of claim **5** wherein the motor is operatively connected to the rear wheel drive assembly via the motor shaft and a gear assembly, the gear assembly comprising a pinion gear, a bevel gear, and an axle gear.

7. The radio-controlled car of claim **6** wherein the pinion gear is formed of brass.

8. The radio-controlled car of claim **4** wherein the motor is adapted to impart rotational motion to the drive shaft.

9. The radio-controlled car of claim **4** wherein the drive shaft is operatively connected to the front-wheel drive assembly via a modular drive shaft gear.

10. The radio-controlled car of claim **3** wherein the front-wheel drive assembly comprises a front gear, a pair of universal joint members coupled to the front gear, a pair of linkage members coupled to the universal joint members, and a pair of knuckle arm assemblies positioned on the linkage members.